

REMARKS

In response to the Final Office Action mailed on February 13, 2007, Applicants respectfully request reconsideration of the rejection of the claims along with an indication that the application is in condition for allowance.

In the Final Rejection of February 13, 2007, the recitation of "an isolating valve operable for flushing and cleaning" was construed by the Examiner only as "a simple valve". The Examiner's rewriting of the claims and the decision to ignore express words of the claims (especially words that were added to a claim in response to a rejection of the claim so as to distinguish over the cited references) is improper. *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111 (Fed. Cir. 2004) (*reaffirmed in Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005)) (en banc) ("all claim terms are presumed to have meaning in a claim.") The Examiner has simply ignored the recitation of the word "isolating" before "valve" and has also ignored the recitation of the phrase "for flushing and cleaning" (note the Examiner says "flushing *or* cleaning") as "the manner of operating the apparatus". However, the words "isolating" and the functional limitation of "for flushing and cleaning" structurally distinguish the invention of claim 21 over the teachings of the cited references as explained below. Accordingly, the rejection of claim 21 as well as the rejection of the other pending claims should be withdrawn and an indication of allowability is appropriate for the pending application.

In the final rejection, the Examiner also incorrectly states that "Dumser shows all of the claimed subject matter except a bypass conduit between the fluid supply inlet and the fluid supply outlet." This statement is incorrect because Dumser does not disclose the following elements of independent claim 21 appearing in bold:

21. (Previously Presented) A fluid-distribution system **including plurality of heat exchangers connected to a commissioning module**, the commissioning module including: a fluid supply port for receiving a working fluid **for supply to the heat exchangers**, means providing a plurality of fluid-supply outlet ports **connected to the inlet ports of the heat exchangers for supplying working fluid to the heat exchangers**, means providing a plurality of fluid-exhaust inlet ports **connected to outlet ports of the heat exchangers for exhausting working fluid from the heat exchangers**, a combined fluid-exhaust port connected to exhaust working fluid from the fluid-exhaust inlet ports, flow rate control means for adjusting the flow rate of the working fluid **supplied to the heat exchangers**, **flow-rate measuring means for measuring the flow rate of the working fluid supplied to the heat exchangers**, first flow-isolating means for opening and closing the fluid supply port of the commissioning module, **flow-bypass means for transferring fluid between the fluid supply port and the fluid-exhaust port**, **bypassing the heat exchangers and fluid drain-off means for draining fluid from the commissioning module**, wherein the flow-bypass means comprises an isolating valve operable for flushing and cleaning.

The pending application included original claims 1-35 and the Examiner required restriction between the claims of invention I (claims 1-19) "drawn to a commissioning module" and the claims of invention II (claims 20-35) "drawn to a multi-zone heat exchange system." However, in the rejection of claims 21-34 (drawn to a multi-zone heat exchange system") the Examiner uses a patent directed only to a commissioning valve as the primary reference and contends that the patent (Dumser) discloses all of the claimed subject matter "except a bypass conduit between the fluid supply inlet and the fluid supply outlet." This statement is wrong and the failure of Dumser to disclose these other elements of claim 21 requires the withdrawal of the final rejection of claims 21- 34.

The Examiner acknowledges that the Dumser patent is missing the isolating valve operable for flushing and cleaning" of claim 21. However, the Examiner improperly relies on the Morgan patent and/or the Sueyoshi patent document for the missing teaching.

In Morgan, there is disclosed a manifold 22 which has a plurality of individual supply lines 23, 25, and 26 each of which is controlled by its own on-off solenoid valve 24. In addition, return lines 39, 40, and 41 go to a return water manifold 42. However, there is no disclosure in Morgan of **"flow-bypass means for transferring fluid between the fluid supply port and the fluid-exhaust port, bypassing the heat exchangers and fluid drain-off means for draining fluid from the commissioning module, wherein the flow-bypass means comprises an isolating valve operable for flushing and cleaning."**

Significantly, in Morgan, the valve 52 is a solenoid valve so that in "low demand situations" the combined flow from the return manifold 42 together with the flow through the solenoid valve 52 "permits water circulation through the condenser/evaporator at full flow rate." There is no disclosure or suggestion in Morgan that the valve 52 can or should be opened other than during said "low demand situations" and there is no disclosure or suggestion that the solenoid valve 52 is "an isolating valve operable for flushing and cleaning." Instead, the solenoid valve 52 is only used during normal operation of the commissioning module to divert some of the flow from the supply manifold to the return manifold.

In Sueyoshi, essentially the opposite configuration is provided in that a "three-way valve" 104 is provided in a bypass circuit 120 to divert some or all of the returning water from the header unit 102 to the header unit 101 (i.e., to divert flow in the opposite direction as in Morgan). In Sueyoshi, the three way valve 104 enables relatively hot water from the (return) header unit 102 to be directed to the supplying header unit 101 rather than being supplied through the valve 108. Again, in Sueyoshi there is no disclosure or suggestion that the three way valve 104 is "an

isolating valve operable for flushing and cleaning." Instead, the three way valve 104 is only used during normal operation of the commissioning module in order to divert some of the flow from the return header 102 to the supply header 101.

The Examiner contends that since Morgan and Sueyoshi disclose "a valve" in a bypass conduit between the supply header and the return header of a commissioning valve that the invention of claim 21 is rendered obvious. However, that conclusion is incorrect because there is no disclosure or teaching in either the Morgan patent or in the Sueyoshi patent document of an isolating valve in a conduit between the supply header and the return header of a commissioning valve nor is there any disclosure or teaching in Morgan or Sueyoshi of an isolating valve for flushing and cleaning. To modify the solenoid valves of Morgan and Sueyoshi (used during normal operation of the commissioning valve to divert some of the flow from the supply header to the return header or to divert some of all of the flow from the return header to the supply header) would require the impermissible use of hindsight to arrive at the claimed invention. In other words, the Examiner is using the disclosure and claims of the pending application as a blueprint to modify the disclosed solenoid diverter valves of Morgan and Sueyoshi in order to arrive at the claimed invention.

The **isolating** valve of claim 21 (and the other pending claims) is a valve that can only be either completely closed or completely open and an isolating valve operates (i.e., is changed from its normally open or normally closed configuration to the other configuration) only while the apparatus is not in its normal operation. The solenoid valves of Morgan and Sueyoshi which are used to divert some of the flow from the supply header to the return header or to divert some of all of the flow from

the return header to the supply header during normal operation of the commissioning module are not isolating valves.

In addition, the solenoid valves of Morgan and Sueyoshi, which operate only when the commissioning valve is in normal operation, are not suitable for flushing and/or cleaning the commissioning module. Since the solenoid valves of Morgan and Sueyoshi do not disclose their use for flushing and cleaning and since these valves would not be appropriate for flushing and cleaning a commissioning module, there is no teaching in either Morgan or in Sueyoshi of an isolating valve operable for flushing and cleaning as recited in claim 21.

Claims 23, 24, 25, 28, 30, 31, 32, and 33 are patentable over the Dumser and Morgan or Sueyoshi documents for the same reasons as claim 21.

Claim 22 was rejected as being obvious in view of the Dumser and Morgan and/or Sueyoshi patents further in view of DE 3101070. In DE 3101070 there is no disclosure of a commissioning valve or anything comparable to a commissioning valve and so one skilled in the art would not look to this disclosure in combination with the Dumser, Morgan and/or Sueyoshi documents. The rejection of claim 22 based upon a modification of the Dumser, Morgan and/or Sueyoshi documents in view of the teachings of DE 3101070 is improper and should be withdrawn.

Claim 26 was rejected in view of the art applied to claim 21 further in view of the Longini patent. Similarly, one skilled in the art would not combine the teachings of the Longini patent in order to provide a "fluid flow-rate control means connected between the combined fluid-exhaust port and a further fluid exhaust port of the commissioning module" based on the flow meter disclosed in the Longini patent.

Claim 27 was rejected in view of the additional teachings of JP 9-210380.

The Examiner misunderstands claim 27. In that claim, it is the flow-rate **measuring means** which includes orifice plates rather than the flow controllers. Therefore, the rejection of claim 27 based on the cited references is improper and should be withdrawn.

Claim 29 was rejected in view of the art applied to claim 21 further in view of JP 2001-141249. Since JP 2001-141249 does not disclose "flow bypass means" as recited in the claims, the drain cock V3 in Fig. 10 does not render the recitation in claim 29 of a "drain-off cock connected to the flow-bypass means of the commissioning module" obvious or unpatentable and this claim should be allowed.

Claim 34 was rejected in view of the art applied to claims 21-33 further in view of FR 2,560,343. Again the Examiner is relying on the impermissible use of hindsight to reject claim 34 based on the teachings of the pending application in order to provide a roadmap for the selective combination of prior art teachings.

Accordingly, Applicant submits that the invention of claim 21 is patentable over the teachings of the prior art whether alone or in combination. Claims 22-34 which depend directly or indirectly from claim 21 are likewise allowable with claim 21. Moreover, the additional features recited in claims 22-34 provide further combinations of elements with the invention recited in claim 21 which are neither anticipated by nor obvious in view of the cited prior art either alone or in combination with one another. There is simply no teaching which would lead one skilled in the art to combine the features of the prior art used to reject claims 22-34 with the prior art applied against claim 21.

A prompt and favorable reconsideration of the pending claims along with an indication of allowability is earnestly solicited.

Applicants invite the Examiner to contact Applicant's representative at the telephone number listed below if any issues remain in this matter, or if a discussion regarding any portion of the application is desired by the Examiner.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.


In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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Date: August 13, 2007

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